



D-DOI-K40222-TT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

JUN 19 1997

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970168

Lieutenant Colonel Ralph H. Graves
District Engineer
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Colonel Graves:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for **CONSTRUCTION OF THE PALAU COMPACT ROAD, BABELDAOB ISLAND, REPUBLIC OF PALAU**. The DEIS was prepared for the U.S. Department of the Interior by the U.S. Army Engineer District, Honolulu. EPA is a cooperating agency on the DEIS. EPA's comments on the DEIS are provided pursuant to the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, the Council on Environmental Quality's Regulations for Implementing NEPA (40 CFR 1500-1508), and Section 404 of the Clean Water Act (CWA). Regarding the completeness of the Section 404 analysis and discussion in the DEIS, our comments are advisory and provided in keeping with CWA Section 404 and the 404(b)(1) Guidelines, 40 CFR 230. EPA participated in the EIS scoping meetings held in Palau on April 24-25, 1996 and provided written scoping comments to the Corps on May 2, 1996. We also provided written comments on the Preliminary DEIS on March 12, 1997.

The proposed project is to construct a safe, high quality, all-weather, two-lane road system on the island of Babeldaob as generally authorized by Section 212(a) of the Compact of Free Association. The proposed roadway has been configured as a loop system with a northern spur. The proposed roadway system would serve as a direct transportation-communication link between the ten states on Babeldaob Island. Ordnance removal and disposal (from the Japanese military before and during World War II) is included as part of the proposed action.

Although we recognize that the proposed project is not in the United States, the regulatory context within which the DEIS must be reviewed by EPA and other cooperating agencies is vague. For example, the regulatory regime associated with ordnance removal and disposal is not portrayed for the reader and cooperating agencies. The DEIS refers to both United States and Republic of Palau (ROP) environmental standards and rules and suggests that U.S. rules will govern in areas of conflict. Presumably, these distinctions and declarations are made for the

Please refer to our detailed comments (attached) for an in-depth discussion of each of these issues, and to our "Summary of Rating Definitions and Follow-Up Action" for a detailed explanation of EPA's rating system. We appreciate the opportunity to comment and welcome an opportunity to discuss our comments with the Corps, the Republic of Palau and the Federal cooperating agencies prior to release of the Final Environmental Impact Statement (FEIS). Please send two copies of the FEIS to me (code: CMD-2) at the letterhead address when it is filed with EPA's Washington, D.C. office. EPA's staff contact for the review of this DEIS is Mr. David Tomsovic, Federal Activities Office, at 415-744-1575. Questions may also be directed to Mr. James Branch, EPA's Palau Project Manager, at 415-744-1601.

Sincerely,



Deanna M. Wieman
Deputy Director
Cross-Media Division

Attachments: 4

- a) Summary of Rating Definitions and Follow-Up Action
- b) Detailed EPA comments on the DEIS
- c) Questions on Plates 1-4 and 1-8
- d) Pollution prevention checklists

M.I. 2854

cc: The Honorable Kuniwo Nakamura, President, Republic of Palau
Tom Bussanich, Insular Affairs, DOI, Washington DC
Patricia Port, DOI, San Francisco
John Naughton, NMFS, Honolulu
Robert Smith, F&WS, Honolulu
Elisabeth Blaug, CEQ, Washington, DC

U.S. EPA Comments on Palau Road Construction, Republic of Palau

NEPA COMMENTS

Purpose and Need for the Proposed Project: The actual purpose and need for the proposed Compact Road is unclear. According to the abstract page in Volume I, the proposed action is to construct a safe, high quality, all-weather, two-lane road system on Babeldaob Island, Republic of Palau (ROP). The DEIS assessed three action alternatives to accomplish this commitment by the United States: a loop system with a northern spur, a spine system and a radial system. We assume that the action alternatives assessed in detail in the DEIS are reasonable alternatives for purposes of NEPA analysis.

However, Volume I (p. 7) contains a more narrowly-drawn purpose and need statement that reflects the Republic of Palau's position: a 53-mile road connecting all communities on Babeldaob with Koror, which would provide "access through, or be near to, known areas having potential for agriculture, forestry, mining, industry and tourism, and near watersheds for future water resource development, rock sources for quarries, potential port development site(s) on the west coast...and the proposed site of the new capital..." Such a narrowly-defined statement of purpose and need greatly restricts the range of reasonable alternatives available to the Corps in its NEPA analysis.

We recommend that the Final Environmental Impact Statement (FEIS) clearly reflect a single statement of purpose and need for the proposed project as defined by the United States Government, Department of the Interior and the Corps. The FEIS should indicate whether the Department of the Interior and the Corps concur with the statement of purpose and need expressed by the Republic of Palau on page 7.

Direct Impacts: Volume II reproduces the various letters issued by the cooperating Federal agencies (EPA, F&WS) on the Preliminary DEIS and the Corps' response to these comments. One comment by the U.S. Fish and Wildlife Service was that the DEIS "should identify quarry sites and describe any impacts caused by their use and development." We consider this to be a reasonable request in terms of disclosing direct impacts associated with the project. We do not consider the Corps' response to be consistent with NEPA's requirements concerning public disclosure of a project's direct environmental impacts. The Corps' response states that the issue can only be addressed in a general manner because of the absence of known locations where quarrying or dredging would occur. The DEIS states "we (Corps) do not concur that the EIS should identify quarry and/or dredge sites." However, the DEIS acknowledges that the road would require aggregate and that such aggregate will be obtained from as-yet undeveloped sources. We believe that the Corps' assertion that the environmental impact statement (EIS) does not need to identify dredge or quarry sites is inconsistent with the Council

know, the CEQ has instructed Federal agencies that "the probability of the mitigation measures being implemented must...be discussed." (Question 19b, Questions and Answers About the NEPA Regulations, CEQ, 1981). The CEQ indicated in this passage that if there is a history of nonenforcement of mitigation measures, "the EIS and Record of Decision should acknowledge such...nonenforcement."

Design Work: We understand that the Corps may commence, or has commenced, design work before the completion of the NEPA process. The FEIS should indicate whether this may limit the choice of reasonable alternatives prior to issuance of the FEIS and issuance of the Record of Decision. We refer you to 40 CFR 1506.1(a) which provides that until a Federal agency has issued a Record of Decision, no action concerning the proposal (project) shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives.

CLEAN WATER ACT (CWA) SECTION 404 COMMENTS

Introduction: The DEIS does not include a fully detailed discussion of the overall requirements of 40 CFR 230. For example, the Section 404(b)(1) Guidelines are specific in terms of the requirements that must be clearly demonstrated before a Section 404 permit can be issued by the Corps. We recognize that the Corps will not issue a Section 404 permit because the project is not in the United States, however, the DEIS indicates that the project would be in substantive compliance (p. 98) with U.S. requirements, which we interpret to mean compliance with the 404(b)(1) Guidelines. For example, 40 CFR 230.10(a) stipulates that no discharge of dredged or fill material shall be permitted "...if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences..." The DEIS fails to demonstrate that the placement of fill material in approximately 21.51 acres of wetlands is absolutely essential in order to satisfy the project's basic purpose (transportation), nor is there a clear demonstration in the DEIS that the proponents have examined measures to avoid or minimize the loss of these 21.51 acres such as realigning the transportation facility to avoid wetlands, mangrove areas and aquatic resources protected under CWA Section 404.

Section 404 Impacts: Volume I (p. 98) indicates that impacts to 51.95 acres of wetlands and 43 rivers and streams "are anticipated" as a result of the proposed action. The placement of fill material in 30.44 acres has already been authorized by the Corps under three separate authorizations (Volume I, Table 3). It thus appears that the placement of fill material in approximately 21.51 acres of wetlands is still unpermitted. For purposes of permitting the placement of fill material in

Coral Reefs (Special Aquatic Site): The DEIS refers to the need to obtain aggregate materials for the proposed Compact Road. Two major aggregate sources are identified: quarrying at onshore sites and dredging to obtain coral. Volume I (p. 35) indicates that "coral dredging is considered to be the least desirable alternative for sources of materials." However, except for that and similar statements, there is no reflection in the DEIS as to the importance placed on coral reefs under the 404(b)(1) Guidelines. The 404(b)(1) Guidelines provide for the protection of several "special aquatic sites," including coral reefs. "Special aquatic sites" are defined as areas

"possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region." (40 CFR 230.3(q-1)).

Under 40 CFR 230.10(a)(3), where the activity associated with a discharge that is proposed for a special aquatic site does not require access or proximity to, or siting within, a special aquatic site in order to fill the basic project purpose (in this case, either transportation or aggregate production), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. No such demonstration has been presented in this DEIS.

We are greatly concerned that the Corps would consider the loss and/or destruction of coral reefs to obtain aggregate for the Compact Road without first undertaking an alternatives analysis examining the following: (1) the comparative merits and practicability of obtaining aggregate at upland versus coral sites, (2) potential ways to avoid or minimize the loss of coral reef habitat, (3) the impacts associated with dredging the reef areas, and (4) mitigation to compensate for the unavoidable loss of coral reefs. The Corps has not clearly demonstrated that the destruction or loss of coral reefs to obtain the aggregate is an unavoidable impact, nor has the Corps clearly demonstrated whether a coral dredging sub-alternative would be in accord with the 404(b)(1) Guidelines. Such an alternatives analysis is required by the 404(b)(1) Guidelines in order to protect special aquatic sites. Additionally, an adequate alternatives analysis should demonstrate whether wetlands, creeks and other waters could be avoided when developing an onshore quarry site; as well as comparing the merits of coral dredge versus onshore quarry sites. Accordingly, as part of the 404(b)(1) alternatives analysis, the FEIS should address the issues noted in this section of our comments.

Wildlife Service, the National Marine Fisheries Service and U.S. EPA. The proposed mitigation should be adequate to compensate for adverse impacts to wetlands and aquatic ecosystems and be reflective of the proposed project's direct, indirect and cumulative effects.

Water Quality Certification: One CWA requirement is the need for water quality certification (or a waiver) before issuance of Section 404 or NPDES permits under the Act. The FEIS should discuss the applicability of the water quality certification process to the proposed project since the Corps will not issue a permit needing water quality certification from either U.S. EPA or an approved State water pollution control authority.

EROSION, SEDIMENTATION AND ADVERSE WATER QUALITY IMPACTS

Volume I (p. 96) indicates that major erosion events more than 20 years ago adversely affected "two previously productive bays," Ngerusar and Airai. The proposed project has the potential to similarly affect coastal, marine and estuarine resources unless all reasonable and practicable efforts are taken to avoid and mitigate such impacts. As indicated in EPA's May 2, 1996 letter, we are particularly concerned about potential direct and indirect impacts associated with road construction in the Ngermeskang/Tabecheding watershed, which drains into Ngeremedu Bay. This bay has the greatest biodiversity for Babeldaob Island.

Our May 2, 1996 letter asked the Corps to examine alternative routing scenarios to avoid potential adverse impacts to marine, coastal, estuarine and wetland resources. We believe that further efforts may avoid impacts to such sensitive resources. For example, in examining Plate 1-4 in Volume II, the proposed road cuts through the edge of a mangrove area approximately two miles northeast of Ngeremedu Bay. A review of Plate 1-8 suggests that a realignment may avoid a significant cut through an inland jut of a mangrove area approximately one mile north of Ngetkib. We ask the Corps and the Republic of Palau to examine the feasibility of moving the proposed road outside these mangrove areas to protect their biological and water quality values. Attached are copies of Plates 1-4 and 1-8 which depict the areas of our concern.

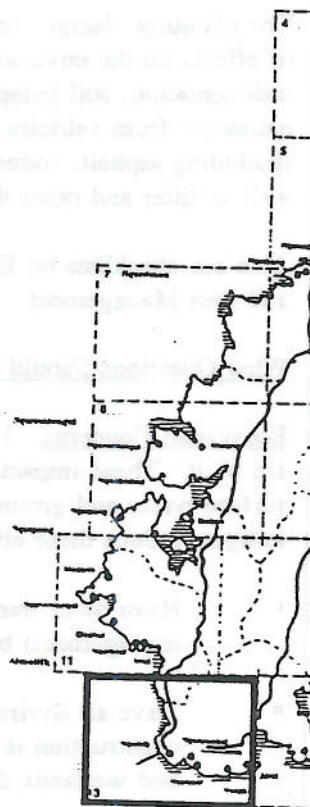
ENDANGERED SPECIES ACT (ESA) CONSULTATION

Volume I (p. 94) indicates that ESA Section 7 consultation has been initiated by the Corps. The results of such consultation should be documented in the FEIS, including mitigation measures that would be implemented by the Corps and the Republic of Palau. Section 7 mitigation measures should be included in the mitigation matrix (see our comment on Mitigation Measures).

established that it is the national policy of the United States that, whenever feasible, pollution should be reduced or prevented at the source, that pollution that cannot be prevented should be recycled in an environmentally sound manner, and that disposal or other release of pollutants into the environment should be employed only as a last resort. The United States Government should and has assumed a leadership role in the field of waste minimization and pollution prevention.

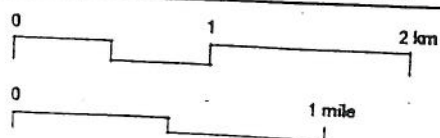
The Council on Environmental Quality issued a memorandum to Federal agencies (January 29, 1993 Federal Register, pp. 6478-6481) in which Federal agencies were encouraged to integrate pollution prevention in NEPA planning and decision-making. CEQ wrote that "...any reasonable mechanism which successfully avoids, prevents, or reduces pollutant discharges or emissions other than by the traditional method...should...be considered pollution prevention."

We strongly encourage the Corps and the Republic of Palau to integrate such techniques in the project's design, construction and operation. For your reference we have attached a pollution prevention checklist for highways and bridges, and habitat preservation and protection. Appropriate commitments should be reflected in the FEIS and the Record of Decision and (if possible) in the contracts with the project contractors. We encourage a process to ensure that the engineering/construction contractors involved in the road's construction adhere to a consistent pollution prevention/waste minimization approach developed by the Corps and the Republic of Palau.



Proposed realignment
suggested by U.S. EPA
to avoid mangrove areas
XXXX
June 1997

proposed Compact Road alignment
existing secondary road alignment
Mangrove areas



North



prepared by : Wai Chee - Planning, Inc.
September 1996

Plate 1 - 8

USGS Sheet No. 13
PROPOSED COMPACT R
revised 5 March 1996

- Will stream crossings be designed to enable fish passage and to maintain natural in-stream structures, such as large culverts? *
- Does the plan include native plant revegetation of areas disturbed by construction to minimize erosion and sedimentation?
- Have safe wildlife crossing structures and appropriate fencing been incorporated into the project to accommodate the movements and needs of resident wildlife and to mitigate habitat fragmentation? Have bridge structures been designed to accommodate wildlife passage, thereby providing a dual purpose? *
- Does the project include the use of noise walls or other techniques to reduce the impacts of noise pollution? *
- Does the project include the planting and maintenance of grass covers or other indigenous plant material to reduce pollutant concentrations in roadway runoff?
- Does the project provide for regular preventive maintenance of the highway or bridge to reduce the potential amount of waste generated by reconstructing portions of the roadway? *
- Can existing roadways or bridges be closed and reclaimed as a result of the construction and opening of the new project? *

Hazardous Material Concerns. The construction of highways and bridges can involve the use of hazardous materials. The use of these materials can affect the environment through improper storage, air emissions of volatile chemicals, and spills and other uncontrolled releases, as well as the potential for the generation of toxic waste materials.

- Are there opportunities to reduce the amount of hazardous and toxic materials used as part of the project? For example, will the least toxic paints and deicing chemicals be used?
- Are there provisions for reducing any potential spills of hazardous materials? Is there a spill prevention and control plan?
- Is there a plan for properly managing the storage, handling, and application of deicing chemicals, salts, and sand?
- Is there an Integrated Pest Management (IPM) plan to reduce the use of chemical pesticides and to minimize human and wildlife exposure?

Procurement Concerns. Purchasing decisions are an important element of pollution prevention. Making environmentally sound purchasing decisions can help reduce the amount of waste generated by a highway or bridge project. In addition, the purchasing of recycled-content material helps support markets for materials collected for recycling.

* Indicates an environmental impact reduction opportunity.

POLLUTION PREVENTION/ENVIRONMENTAL IMPACT REDUCTION CHECKLIST FOR HABITAT PRESERVATION AND PROTECTION

How Can Ecosystem Preservation and Protection Affect the Environment?

In the face of development activities, populations of indigenous plants and wildlife can be protected only through the protection and preservation of ecosystems necessary for their survival. Ecosystem requirements are species-specific and can include a variety of factors, such as soil type, water regime, climate, and plant and animal associations. Ecosystems are defined by the structure and function of plant and animal communities and by the habitats they utilize. The protection and preservation of ecosystems are important for a number of reasons, which include the protection of wildlife, climate control, maintenance of biodiversity sources, pollutant detoxification, erosion control, and CO₂ sequestration.

Wetlands are ecosystems necessary for the survival of a host of aquatic and terrestrial species. In addition, wetlands are integral parts of the hydrological system and are necessary for the maintenance of water supplies and water quality.

Ecosystems face a number of threats that reduce the area available for wildlife, change the character of the species that inhabit particular habitats, or change their form through the alteration of features, including topography or water regime. Ecosystem preservation efforts are generally directed at protecting particular species, such as endangered or threatened species, recreationally or aesthetically important species, or commercially important species. It should be noted, however, that habitat preservation (or creation or enhancement) for one species can adversely affect other species.

Also see checklists on Pest Management, Siting, Landscaping, Water Use, Grazing, and Forestry Activities.

What Questions Should Be Asked To Ensure That These Effects Are Minimized or Eliminated?

Habitat Fragmentation Concerns. Existing habitats are typically damaged through fragmentation, often due to encroachment. Reduction in the size of an existing habitat can reduce the number of individual organisms, as well as the diversity of species, that it can support. A number of techniques can help mitigate/reduce the effects of fragmentation.

- Have other sites been considered as an alternative to encroaching on the existing habitat? *
- Has the critical area necessary for survival of the ecosystem been determined? Can the area of the habitat that will be altered be minimized? *
- Has the project been designed to avoid the fragmentation of existing habitats into a number of smaller areas? *
- Have transportation corridors, such as roads and power lines, been designed to avoid encroaching on sensitive habitats? *
- Does the project establish a system of natural corridors (which take into consideration the behavior of the species in question) to link habitat areas? *

*Indicates an environmental impact reduction opportunity.

EPA REGION IX SUMMARY PARAGRAPH

ERP NUMBER:

D-DOI-K40222-~~#~~ *AI*

CEQ NUMBER:

971068

DATE OF EPA COMMENT LETTER:

06/19/97

DATE SENT TO EPA HQ:

07/01/97

NAME OF PRINCIPAL REVIEWER:

TOMSO

NAME OF PROJECT EIS:

Palau Compact Road Construction, Babeldaob Island Republic of Palau

SUMMARY PARAGRAPH:

environmental

EPA expressed ^{environmental} objections because the DEIS did not disclose the impacts associated with developing quarry or coral dredge sites needed to obtain aggregate for the road; did not clearly demonstrate compliance with the Clean Water Act 404(b)(1) Guidelines; failed to show why it is necessary to place fill material in 21 acres of wetlands and mangrove areas; did not clearly show that all appropriate measures were taken to avoid and minimize the placement of fill in Section 404-regulated areas; and did not provide any mitigation to compensate for the fill placed in 21 acres of wetlands.

APPROVED FOR FEDERAL REGISTER PUBLICATION BY: _____